CLAIMS

1. A dike apparatus for the secondary containment of released materials from a primary storage vessel to reduce the dangers associated with the exposure of harmful materials to the environment and living creatures, the dike apparatus comprising:

a. a plurality of wall sections, each wall section having a first vertical end and a second vertical end, the plurality of wall sections being operably connected to form an inner chamber;

b. at least one brace operably connected to at least one of the plurality of wall sections, the at least one brace configured to support at least a portion of the plurality of wall sections;

c. at least one base plate operably connected to the at least one brace, the at least one base plate having a distal end and a proximate end, a substantial portion of the proximate end being positioned within the region of the inner chamber; and

d. a flexible liner, at least a portion of the flexible liner positioned within the inner chamber, the flexible liner being operably attached to at least a portion of the plurality of wall sections.

2. The apparatus of claim 1 further comprising at least one base support channel operably connected to at least a portion of the at least one base plate.

3. The apparatus of claim 2 further comprising at least one support cable, the at least one support cable being operably attached to the at least one base support channel.

4. The apparatus of claim 2 further comprising at least one support cable, the at least one support cable having a first end and a second end, the first end being operably connected to a first base support channel, the second end being operably connected to a second base support channel.

5. The apparatus of claim 1 further comprising at least one support cable, the at least one support cable being operably attached to the at least one base plate.

6. The apparatus of claim 1 wherein the at least one base plate includes at least one side extension, the at least one side extension configured to provide traction to the at least one base plate.

7. The apparatus of claim 1 wherein the at least one brace includes a stiffening plate, the stiffening plate configured to assist the at least one brace resist outwardly forces that are exerted against the inner chamber.

8. The apparatus of claim 1 wherein each wall section of the plurality of wall sections includes a first vertical end and a second vertical end, the first vertical end being substantially parallel to the second vertical end, the first vertical end being oriented to overlapped the second vertical end of an adjacent wall section.

9. A dike apparatus for the secondary containment of released materials from a primary storage vessel to reduce the dangers associated with the exposure of harmful materials to the environment and living creatures, the dike apparatus comprising:

a. a plurality of wall sections, each wall section having a first vertical end and a second vertical end, the plurality of wall sections being operably connected to form an inner chamber;

b. at least one brace operably connected to at least one of the plurality of wall sections, the at least one brace having a body portion, the body portion configured to resist outwardly forces exerted by the released materials against at least a portion of the plurality of wall sections;

c. at least one base plate operably connected to the at least one brace, the at least one base plate having a distal end, a proximate end, and at least one side extension, a substantial portion of the proximate end being positioned within the inner chamber, the at least one side extension configured to provide traction to the at least one base plate against lateral forces exerted by the released materials; and

d. a flexible liner, at least a portion of the flexible liner positioned within the inner chamber, the flexible liner being operably attached to at least a portion of the plurality of wall sections.

10. The apparatus of claim 9 further comprising at least one base support channel connected to at least a portion of the at least one base plate.

11. The apparatus of claim 10 further comprising at least one support cable, the at least one support cable being operably attached to the at least one base support channel.

12. The apparatus of claim 10 further comprising at least one support cable, the at least one support cable having a first end and a second end, the first end being operably connected to a first base support channel, the second end being operably connected to a second base support channel.

13. The apparatus of claim 9 further comprising at least one support cable, the at least one support cable being operably attached to the at least one base plate.

14. The apparatus of claim 9 wherein the at least one base plate includes at least one side extension, the at least one side extension configured to provide traction to the at least one base plate.

15. The apparatus of claim 9 wherein the at least one brace includes a stiffening plate, the stiffening plate configured to assist the at least one brace resist outwardly forces that are exerted against the inner chamber.

16. A dike apparatus for the secondary containment of released materials from a primary storage vessel to reduce the dangers associated with the exposure of harmful materials to the environment and living creatures, the dike apparatus comprising:

a. a plurality of wall sections, each wall section having a first vertical end and a second vertical end, the first vertical end being substantially parallel to the second vertical end, the first vertical end being oriented to overlapped the second vertical end of an adjacent wall section, the overlapping arrangement of the plurality of wall sections being operably connected to form an inner chamber;

b. at least one brace, the at least one brace having a body portion, a stiffening plate, an upper flange, and a lower flange, the upper flange operably connected to a portion of the plurality of wall sections;

c. at least one base plate, the at least one base plate having an upper surface, a bottom surface, a distal end, a proximate end, and at least one side extension, the upper surface being operably connected to the lower flange, the at least one side extension configured to provide traction to the base plate against lateral forces exerted by the released material;

d. at least one base support channel, the at least one base support channel operably connected to at least a portion of the bottom surface of the at least one base plate;

e. at least one support cable, the at least one support cable being operably attached to at least one of the at least one base support channel; and

f. a flexible liner, at least a portion of the flexible liner positioned within the inner chamber, the flexible liner being operably attached to at least a portion of the plurality of wall sections.

17. The apparatus of claim 16 wherein the at least one support cable includes a first end and a second end, the first end being operably connected to a first base support channel, the second end being operably connected to a second base support channel.

18. The apparatus of claim 16 further comprising a pad constructed from a geotextile material, the pad configured for insertion into the inner chamber, the pad being operably connected to at least a portion of the plurality of wall sections.

19. A method for constructing a secondary containment dike apparatus for the containment of released materials from a primary storage vessel to reduce the dangers associated with the exposure of harmful materials to the environment and living creatures comprising:

a. connecting a plurality of wall sections to form an inner chamber;

b. securing the plurality of wall sections to at least one brace, the at least one brace having a body portion, the body portion configured to support the plurality walls and to resist outwardly forces exerted against at least a portion of the plurality of wall sections by the released material;

c. mounting the at least one brace to at least one base plate, the at least one base plate having an upper surface, a bottom surface, a proximate end, and a distal end, the distal end being positioned within the inner chamber; and

d. inserting a flexible material into at least a portion of the inner chamber, the flexible material configured to prevent the passage of the released material therethrough.

20. The method of claim 19 further comprising attaching at least one base support channel to the at least one base plate.

21. The method of claim 20 further comprising securing at least one base support cable to at least one of the at least one base support channel.

22. The method of claim 19 further comprising securing at least one support cable to at least one of the at least one base plate.

23. The method of claim 19 further comprising covering at least a portion of the flexible material in the inner chamber with a solid material.